



# Environmental governance on the street: Towards an expanded research agenda on street-level bureaucrats

Kirsty Holstead<sup>a,b,\*</sup>, Mikkel Funder<sup>c</sup>, Caroline Upton<sup>d</sup>

<sup>a</sup> University of St Andrews, School of Management, North Haugh, St Andrews, KY16 9RJ, Scotland, UK

<sup>b</sup> James Hutton Institute, Social Economic and Geographical Science Group, Craigiebuckler, Aberdeen, AB15 8QH, Scotland, UK

<sup>c</sup> Sustainable Development & Governance, Danish Institute for International Studies, Østbanegade 117, 2100, Copenhagen, OE, Denmark

<sup>d</sup> School of Geography, Geology and the Environment, University of Leicester, University Road, Leicester, LE1 7RH, UK

## ARTICLE INFO

### Keywords

Street-level bureaucrats  
Environmental governance  
Frontline work  
Civil servants  
Agency  
Practice

## ABSTRACT

Research on environmental governance would benefit from greater attention to the practices, agency and subjectivities of the frontline civil servants who implement and shape environmental policies and interventions on the ground. These actors conduct the everyday work of bringing global agreements and state policies into being. In doing so, they influence how citizens experience the state and environmental governance. In this review paper, we provide a brief overview of existing literature on 'street-level bureaucrats' (SLBs). We then suggest three key research areas through which insights into the role of SLBs in environmental governance could be further developed, including (i) the nature of SLBs agency and practice as they enact global and national environmental agendas, (ii) the subjectivities of SLBs and how they affect environmental governance and (iii) the outcomes of the activities of SLBs on state-citizen relations. This research agenda has explanatory power in understanding existing and desired environmental governance.

## Introduction

Environmental policies and agreements do not move automatically from political decision-making to practical implementation. They are carried forward by actors who mediate, shape and enact them through everyday environmental governance (Cornea et al., 2017). In this paper, we argue for greater attention to one particular group of actors, whose role in shaping environmental governance deserves more attention – the civil servants who operate at the 'street level'. These actors, such as local planners, enforcement officers, technical experts and community engagement specialists, working across environmental domains including water, forestry and climate change, conduct the everyday work of bringing policies into being on the ground. In doing so, they occupy a significant position at the interface between the state and citizens. While there is a well-established literature on street-level bureaucrats (SLBs) in diverse areas related to social policy including health care, security and education, the academic literature is more limited when it comes to their role within environmental governance. In this paper we aim to draw attention to SLBs as somewhat understudied actors in environmental governance and suggest new avenues for research. We see value in expanding and deepening scholarship on SLBs to

enhance insights on the ways in which everyday environmental governance takes place, and how environmental agendas and policies are shaped in practice.

This review paper is structured as follows: we first provide a brief overview of existing literature on street-level bureaucrats. This is not an exhaustive review; rather summarise the main contours of pertinent scholarship. We then suggest three key areas for future research to advance understandings of the roles of SLBs in environmental governance including: (i) the nature of their practice and agency in the enactment of global and national environmental agendas, (ii) their subjectivity and how this affects environmental governance and (iii) the outcomes of SLB activities on state-citizen relations. We end with short conclusions.

## 2. Who are street-level bureaucrats and why do they matter in environmental governance?

The seminal work of Lipsky (1980, 2010) conceptualised SLBs as civil servants who operate at the front line of the state, come into contact with citizens and influence how they experience and receive state services. This, and later work recognised street-level bureaucrats as

\* Corresponding author. University of St Andrews, School of Management, North Haugh, St Andrews, KY16 9RJ, Scotland, UK.

E-mail address: [kh38@st-andrews.ac.uk](mailto:kh38@st-andrews.ac.uk) (K. Holstead).

<https://doi.org/10.1016/j.esg.2021.100108>

Received 11 February 2021; Received in revised form 27 April 2021; Accepted 19 May 2021

Available online 3 June 2021

2589-8116/© 2021 The Authors.

Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

influential in public policy because of the strong degree of discretion and agency they have as enact and translate policies in everyday settings. Since then, other studies have expanded our understanding of SLBs and their work, exploring their roles as ‘boundary spanners’, facilitators and intermediaries, and how they respond to changes in policy processes, demands for accountability and changing governance configurations (Durose, 2011; Van Assche et al., 2020; Van Meerkerk and Edelenbos, 2018; Bartels, 2020; Sager et al., 2020).

Within environmental governance, various practitioners’ fora exist in which SLBs engage to share experiences (Faure et al., 2015), but the academic literature is more limited. We suggest that greater attention to SLBs in this field can provide a range of benefits. First, SLBs have a significant role in determining how environmental governance takes place and is experienced by the public. Charged with everyday implementation, they must negotiate the challenges and accountabilities of their roles and affiliations with other actors, and in some cases may even circumvent the interests of their organisations (Sager et al., 2020). Increased attention to these actors can provide a deeper understanding of how governance is achieved, the barriers and challenges they experience and how they may (re)shape policies as they are ‘translated’ into local situations (Funder and Mweemba, 2019). Second, the front-line nature of their work means that SLBs influence not only citizens’ experiences of the state and public state services, but also citizens’ perceptions of their own role in governance and society. As such, increased attention to SLBs in governance can add important new dimensions to our understanding of state-citizen interactions (Bartels, 2020). SLBs are thus critical but sometimes overlooked or simplified actors in the governance process, whose position at the interface between the state and citizens deserves more attention within studies of environmental governance. In the following, we briefly describe key literature and points of entry that can help further this research agenda.

### 3. Brief overview of the literature

Street-level bureaucrats are considered across a range of literature. However, two distinct bodies, namely, Public Administration and Anthropology, provide the most focused and sustained attention to these actors. We provide brief comments on these and their application to environmental governance, before highlighting our proposed research agenda.

#### 3.1. Street-level bureaucrats in the Public Administration literature

The work of Lipsky on SLBs (1980/2010) was developed in the context of Public Administration Studies and remains influential within the field. A key interest here are the *attributes of street-level bureaucrats and how they shape their activities*. Internal factors such as the disposition, values and beliefs of individual bureaucrats are accentuated as influencing the conduct of street-level bureaucrats across diverse areas of public policy (May and Winter, 2009; Harrits, 2019). A second focus of literature explores *Organisational factors and their effects*, such as the norms and management paradigms often in operation within the context where SLBs work (Brodin, 2011). Finally, *how SLBs employ agency and discretion* and to what end forms a third area of scholarship. Scholars focus on a wide range of ‘coping strategies’ during public service delivery as well as positionality of SLBs, accountability, how they view themselves and others they work with (Tummers et al., 2015; Zacka, 2017; Blijleven and van Hulst, 2020).

#### 3.2. ‘Interface bureaucrats’ and anthropologies of the state

A parallel interest in everyday bureaucratic practices has developed in anthropological studies of the production of the state (Berenschot and van Klinken, 2018; Sharma and Gupta, 2009). This includes a developing body of work on “interface bureaucrats”, which explores the work of local state actors at the interface between public institutions and

citizens (Bierschenk and Olivier de Sardan, 2014; De Herdt and Olivier de Sardan, 2015). Much of this literature draws on studies of African states. While it emphasises the importance of contextual factors, it also explores fundamental aspects of the “everyday state” (Olivier de Sardan, 2015), thus resonating with the work in Public Administration studies. Health, education, policing and justice are key areas of interest in anthropological studies of the state. Themes explored include how SLBs negotiate the dual role of administering state monopolies on violence whilst also delivering public services (De Herdt and Titeca, 2016; Hamani, 2014); the social connectedness and networks of SLBs (Anders, 2009; Blundo, 2015); and the significance of “practical norms” in their behaviour (De Herdt and Olivier de Sardan, 2015).

#### 3.3. Prior work on the role of street-level bureaucrats in environmental governance

Within the above bodies of scholarship, a developing strand examines the work of SLBs specifically in environmental governance. This includes work on environmental managers and regulators (Horne et al., 2016; Sevä and Sandstrom, 2017); scientists working in state environmental agencies (Arnold 2014); irrigation officials (Ricks, 2016); forest and wildlife rangers (Kairu et al., 2018; Poppe, 2012); and implementers of climate change policies (Christoplos et al., 2017; Lindegaard, 2018). These studies provide important insights into: the characteristics and organisational contexts of SLBs in environmentally related fields (Trusty and Cervený, 2012); how discretionary practices may reshape policies (Sevä and Jägers; Funder and Mweemba 2019); and how enforcement styles may vary and have different impacts (Horne et al., 2016). Outside of the literature focused specifically on SLBs, their roles have also periodically been examined. This includes Political Ecology and Development Studies, where critical studies have examined how SLBs may extend external domination and resource control in environmental governance (Cleaver, 2018; Nightingale, 2017), or otherwise engage in natural resource conflicts and contested developmental interventions in the Global South (Furlong et al., 2017; Tsing, 2011).

While the existing literature has provided important insights on which further work can build, in-depth studies of the specific practices and agency of SLBs remain comparatively scarce in broader work on environmental governance. Existing scholarship provides limited insight into who contemporary environmental SLBs actually are, how their subjectivities are formed and shape their discretionary actions, and what their pragmatic practices and agency mean for environmental governance.

### 4. Moving forward: interrogating the role of street-level bureaucrats in environmental governance

To progress understandings of street-level bureaucrats in environmental governance we argue for more sustained attention to the three (non-exhaustive) research areas below.

#### 4.1. What is the nature of street-level practice and agency in environmental governance?

A fertile ground for exploring the work of street-level bureaucrats in environmental governance is the processes whereby global and national agendas and programmes on e.g. climate change are implemented and ‘domesticated’ by SLBs. Public Administration literature demonstrates how SLBs actively employ discretion in the implementation and interpretation of policies, regulation and enforcement in health, education and law, and in so doing may reshape the nature of policy and public services on the ground (de Winter and Hertogh, 2020; Tummers and Beekers, 2014; May and Winter 2009). This includes pragmatic responses when faced with the day-to-day challenges of their roles (Blijleven and van Hulst, 2020). The anthropological work mentioned above highlights how such discretionary actions can become institutionalised

as “practical norms” that guide SLBs in carrying out their work in complex local realities (Olivier de Sardan, 2015).

The existing work that explores the role of SLB discretion in environmentally related fields suggests that their impact on shaping policy and regulation is significant here also. This includes contexts where formal procedures might otherwise appear to be firmly in place, e.g. in the implementation of EU water regulation (Sevä and Sandstrom, 2017) or the enforcement and monitoring of environmental regulation (Horne et al., 2016). Other work in environmental regulation and forestry demonstrates how SLBs may engage in processes of ‘bricolage’ or ‘crafting’ whereby regulatory arrangements are pieced together in practice (Kairu et al., 2018). In such processes, SLB’s may adapt policies to fit local circumstances, or include more substantive efforts to re-shape the nature of government policies (Funder and Mweemba, 2019; Furlong et al., 2017).

These and other studies on SLB practice in environmental fields are however scattered, limited in number and would benefit from (i) being expanded and explored in-depth in a greater variety of settings and (ii) being systematically compared across different environmental governance contexts. Future theorising could specify the factors accounting for different practices, or key areas and kinds of discretion. For example, what is the form and extent of SLB discretion under different political and institutional conditions? Such research could be enriched by linking to broader work in Organisational Sociology on “Institutional Work” (Beunen and Patterson, 2019; Lawrence et al., 2011) and ‘practice’ literature (Orr et al., 2016; Van Assche et al., 2020; Blijleven and van Hulst, 2021). Recent research on SLBs in public policy has further highlighted how “service hybridisation” places responsibility for public services in the hands of a range of actors, including both private sector and regulatory bodies, thereby potentially blurring the boundaries between the functions of public sector SLBs and similar actors in other domains (Sager et al., 2020; Abbott et al., 2017; van de Heijden, 2017). The implications of such processes for SLB agency in environmental governance are important to understand at a time where relationships between public and corporate domains are increasingly fluid (Vatn, 2018).

#### 4.2. How do the subjectivities of street-level bureaucrats affect environmental governance?

The role of SLB subjectivities and implications for environmental governance remain poorly understood. How do the identities, perceptions and social status of SLBs shape - and how are they shaped by - their position as frontline workers in environmental interventions, and what does this mean for their conduct? The existing literature on SLBs provide initial entry points for exploring this, emphasising how SLBs must negotiate moral judgement, professional and personal identities, policy beliefs, ideals and aspirations in their work (Zacka, 2017; Lundmark, 2020; Bartels, 2020). Some aspects of official policies and discourses may be subconsciously engrained in the outlook of SLBs through organisational culture and training, but other aspects may jar with personal normative convictions, and with SLB’s experience of ‘what works’. Personal ideals and professional standards may be at odds with ineffective, hierarchical and even corrupt government organisations. The challenge of balancing such inconsistencies may lead to disenchantment and abandonment of efforts to change organisational practice, turning instead to reproducing them (Lipsky, 1980), but it can also lead to efforts to drive change (Hahonou, 2015; Hamani, 2014).

Few studies have explored the relationship between SLB subjectivities and their conduct within environmental governance, although some work has touched on the issue. Blundo and Glasman (2013) examined the positionalities of “bureaucrats in uniform” in forest and wildlife agencies, and the implications for SLB practices. Horne et al. (2016) found feelings of disempowerment among field officers in pollution regulation, connected to changing roles and a narrowing discretionary space, leading some to abandon ideals. Funder and

Mweemba (2019) showed how field staff disagree with climate change interventions that they are implementing, and therefore modify them.

A more in-depth exploration of the role of SLB subjectivities and what they mean for everyday environmental governance is needed. A key issue is how the changing dynamics of markets, states and civil societies in environmental governance affect SLB subjectivities (Christoplos et al., 2017). What, for example, does a greater reliance on market mechanisms and private actors in environmental regulation mean for the ways SLBs perceive and make sense of their roles, and how does this affect their practices and agency? A further theme is how SLBs align their often composite and complex professional identities, such as being enforcers of environmental regulation, while at the same time being required to facilitate inclusive stakeholder-driven approaches (Maynard-Moody and Musheno, 2000). How, for example, do their personal ideals align with interventionist or inclusive regulatory practices, and what does this mean for their dispositions? To examine such issues, we suggest widening the conventional lens of SLB studies to link with broader work on power and subject positions (Bourdieu, 1990; Fletcher and Cortes-Vazquez, 2020) and sociological literatures on sense-making (Weick, 1995).

#### 4.3. How does the work of SLBs affect state-citizen relations in environmental governance?

Within the broader literature on SLBs the focus has often been on their practices, while the outcomes of their work are often unclear or presumed (Brodikin, 2015). Nevertheless, the outcomes of SLB actions clearly reach beyond their immediate tasks of service provision and regulatory functions. Studies within Political Ecology and other fields have explored the broader dynamics of domination, power and resistance between state actors and communities in environmental governance (Sultana, 2020). Yet we know little about the outcomes of SLB discretion and subjectivities within this dynamic.

SLBs not only influence how people receive state services but serve as mechanisms through which citizen’s social status and identities are mediated (Soss et al., 2011). Interactions with SLBs can be formative in mediating how citizens see themselves in relation to the state and their own position in society. The literature shows how SLBs may also shield, buffer and adapt the formal demands of their organisations vis-à-vis citizens (Tummers et al., 2015). This includes bending rules or using personal resources to help citizens. In some cases, SLBs step outside their position as “state agent” and become “citizen agents” (Maynard-Moody and Musheno, 2000; Zacka, 2017; Bartels, 2020). These actions have unanticipated consequences both in how SLBs regulate their emotions and professional positions, as well as in terms of outcomes of governance and policy implementation and state-citizen relations.

Within environmental governance specifically, research on the effects of SLB conduct on state-citizen relations are mostly found outside the conventional SLB literature. Examples include Cleaver’s (2018) work on how everyday accommodation reproduces inequalities in water governance, studies of how Forest Officers shape community forest management discourse in directions that sustain state control (Li, 2007; Nightingale, 2005), and work in legal anthropology on the role of local officials in the dynamic production of public authority through land contestations (Lund, 2006).

We suggest that this scholarship can be expanded to further theorise the outcomes of SLB work in terms of both the discursive and material effects of their actions in environmental governance. This includes moving our perspective beyond issues of domination and resistance towards understanding the outcomes of pragmatism, co-production and increasing hybridisation of services and governance. Key to the activities of many SLBs is compromise and collusion with other actors. Does the work of SLBs merely reproduce the authority and legitimacy of the state in environmental governance, or are there unintended outcomes? More broadly, what types of citizens benefit from the work of SLBs, and what forms of environmental governance does it (re)produce? Examination of



such issues could benefit from linking SLB studies to broader approaches in anthropology, sociologies of power and critical institutionalism (Cleaver and De Koning, 2015) that seek to explore the “awkward engagements” (Tsing, 2011) of multiple actors whose interactions produce outcomes that are not necessarily predictable.

## 5. Conclusion

In this paper we spotlight street-level bureaucrats as understudied actors in environmental governance and provide a review of the somewhat-fragmented existing academic literature. SLBs should be seen as significant actors in their own right, and future research should usefully focus on them and their interactions with other local actors as they (re)interpret, perform and (re)-shape policies and programmes. We suggest three key (but non-exclusive) areas for development including (i) the nature of SLBs agency and practice (ii) the subjectivities of SLBs, and (iii) the outcomes of SLB activities on state-citizen relations in environmental governance. Interrogating environmental governance not only necessitates an analysis of formal policies and organizational arrangements, but also the informal and often hidden work of streetlevel actors, who operate at the intersections of governance. We argue that this orientation has explanatory power in understanding existing and desired environmental governance. By looking inside the ‘front-line’ to uncover the subjectivities, discretionary qualities and outcomes of governance practice, scholars and practitioners can understand the key moments where environmental policies and outcomes could be rendered differently.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgements

The authors would like to thank Dr Shona Russell for commenting on the paper, as well as an anonymous reviewer. We also gratefully acknowledge the funders of our research. KH’s work is funded by the Scottish Government’s Hydro Nation Scholars Programme.

## References

- Abbott, K., Levi-Faur, D., Snidal, D., 2017. Introducing regulatory intermediaries. *Ann. Am. Acad. Polit. Soc. Sci.* 670 (1), 6–13.
- Anders, G., 2009. Like chameleons: civil servants and corruption in Malawi. In: Blundo, Le Meur, P.-Y. (Eds.), *The Governance of Daily Life in Africa*. Brill.
- Arnold, G., 2014. Policy learning and science policy innovation adoption by street-level bureaucrats. *J. Publ. Pol.* 34 (3), 389–414.
- Bartels, K., 2020. Fitting in: the double-sided work of intermediating social innovation in local governance. In: Sullivan, H., Dickinson, H., Henderson, H. (Eds.), *The Palgrave Handbook of the Public Servant*. Palgrave Macmillan.
- Berenschot, W., van Klinken, G., 2018. Informality and citizenship: the everyday state in Indonesia. *Citizen. Stud.* 22 (2), 95–111.
- Beunen, R., Patterson, J., 2019. Analysing institutional change in environmental governance: exploring the concept of ‘institutional work’. *J. Environ. Plann. Manag.* 62 (1), 12–29.
- Bierschenk, T., Olivier de Sardan, J.P. (Eds.), 2014. *States at Work : Dynamics of African Bureaucracies*. Brill.
- Blijleven, W., van Hulst, M., 2020. Encounters with the organisation: how local civil servants experience and handle tensions in public engagement. *Local Govern. Stud.* 1–25. <https://doi.org/10.1080/03003930.2020.1857247>.
- Blijleven, W., van Hulst, M., 2021. How do frontline civil servants engage the public? practices, embedded agency, and bricolage. *Am. Rev. Publ. Adm.* 0275074020983805.
- Blundo, G., 2015. The King Is Not a Kinsman: Multiple Accountabilities and Practical Norms in West African Bureaucracies *Real Governance and Practical Norms in Sub-Saharan Africa*. Routledge, pp. 152–169.
- Blundo, G., Glasman, J., 2013. Introduction: bureaucrats in uniform. *Sociologus* 63, 1–9.
- Bourdieu, P., 1990. *The Logic of Practice*. Polity, Cambridge.
- Brodin, E.Z., 2011. Policy work: street-level organizations under new managerialism. *J. Publ. Adm. Res. Theor.* 21 (Suppl. 1/2), i253–i277.
- Brodin, E.Z., 2015. The inside story: street-level research in the US and beyond. In: Hupe, P., Hill, M., Buffat, A. (Eds.), *Understanding Street-Level Bureaucracy*. Policy Press, pp. 25–42, 2015.
- Christoplos, I., Ngoan, L.D., Sen, L.T.H., Huong, N.T.T., Lindegaard, L.S., 2017. The evolving local social contract for managing climate and disaster risk in Vietnam. *Disasters* 41 (3), 448–467.
- Cleaver, F., 2018. *Everyday Water Injustice and the Politics of Accommodation*. Cambridge University Press, Cambridge. Water Justice.
- Cleaver, F.D., De Koning, J., 2015. Furthering critical institutionalism. *Int. J. Commons* 9 (1), 1–18.
- Cornea, N.L., Véron, R., Zimmer, A., 2017. Everyday governance and urban environments: towards a more interdisciplinary urban political ecology. *Geography Compass* 11 (4), e12310.
- De Herdt, T., Olivier de Sardan, J.P., 2015. *Real Governance and Practical Norms in Sub-Saharan Africa: the Game of the Rules*, vol. 7. Routledge.
- De Herdt, T., Titeca, K., 2016. Governance with empty pockets: the education sector in the democratic Republic of Congo. *Dev. Change* 47 (3), 472–494.
- de Winter, P., Hertogh, M., 2020. Public servants at the regulatory front lines. *Street-Level enforcement in theory and practice*. In: Sullivan, H., Dickinson, H., Henderson, H. (Eds.), *The Palgrave Handbook of the Public Servant*. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-03008-7\\_4-1](https://doi.org/10.1007/978-3-030-03008-7_4-1).
- Durose, C., 2011. Revisiting Lipsky: front-line work in UK local governance. *Polit. Stud.* 59 (4), 978–995.
- Fletcher, R., Cortes-Vazquez, J.A., 2020. *Beyond the Green Panopticon: New Directions in Research Exploring Environmental Governmentality*. SAGE Publications Sage UK, London, England.
- Faure, M., De Smedt, P., Stas, A., 2015. *Environmental Enforcement Networks: Concepts, Implementation and Effectiveness*. Edward Elgar Publishing.
- Funder, M., Mweemba, C., 2019. Interface bureaucrats and the everyday remaking of climate interventions: evidence from climate change adaptation in Zambia. *Global Environ. Change* 55, 130–138, 03/2019.
- Furlong, K., Carré, M.-N., Guerrero, T.A., 2017. Urban service provision: insights from pragmatism and ethics. *Environ. Plann.* 49 (12), 2800–2812.
- Harris, G.S., 2019. Stereotypes in context: how and when do street-level bureaucrats use class stereotypes? *Publ. Adm. Rev.* 79 (1), 93–103.
- Hahonou, E., 2015. *Juggling with the Norms: Informal Payment and Everyday Governance in Healthcare Facilities Niger*. *Real Governance and Practical Norms in Sub-Saharan Africa the Game of the Rules*. Routledge, London and New York, pp. 123–140.
- Hamani, O., 2014. We make do and keep going! Inventive practices and ordered informality in the functioning of the district courts in Niamey and Zinder (Niger). In: Bierschenk, T., Oliver de Sardan, J.-P. (Eds.), *States at Work: Dynamics of African Bureaucracies*. Brill.
- Horne, R., Strengers, Y., Stempel, A., 2016. Policing and polluting: the role of practices in contemporary urban environmental pollution governance. *Environ. Sci. Pol.* 66, 112–118.
- Kairu, A., Upton, C., Huxham, M., Kotut, K., Mbeche, R., Kairo, J., 2018. From shiny shoes to muddy reality: understanding how meso-state actors negotiate the implementation gap in participatory forest management. *Soc. Nat. Resour.* 31 (1), 74–88.
- Lawrence, T., Suddaby, R., Leca, B., 2011. Institutional work: Refocusing institutional studies of organization. *J. Manag. Inq.* 20 (1), 52–58.
- Li, T., 2007. *The Will to Improve Governmentality, Development, and the Practice of Politics*. Duke Press.
- Lindegaard, L.S., 2018. Adaptation as a political arena: interrogating sedentarization as climate change adaptation in Central Vietnam. *Global Environ. Change* 49, 166–174.
- Lipsky, M., 1980. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. Russell Sage Foundation, New York.
- Lipsky, M., 2010. *Street-level Bureaucracy: Dilemmas of the Individual in Public Services*, 30th anniversary edition. Russell Sage Foundation, New York.
- Lund, C., 2006. Twilight institutions: public authority and local politics in Africa. *Dev. Change* 37 (4), 685–705. <https://doi.org/10.1111/j.1467-7660.2006.00497.x>.
- Lundmark, C., 2020. The connectivity dilemma in freshwater management: exploring the role of street level bureaucrats in water governance. *Water Pol.* 22 (6), 1067–1081.
- May, P.J., Winter, S.C., 2009. Politicians, managers, and street-level bureaucrats: influences on policy implementation. *J. Publ. Adm. Res. Theor.* 19 (3), 453–476.
- Maynard-Moody, S., Musheno, M., 2000. State agent or citizen agent: two narratives of discretion. *J. Publ. Adm. Res. Theor.* 10 (2), 329–358.
- Meerkerk, I., Edelenbos, J., 2018. *Boundary Spanners in Public Management and Governance*. Edward Elgar, Cheltenham.
- Nightingale, A.J., 2005. “The experts taught us all we know”: professionalisation and knowledge in Nepalese community forestry. *Antipode* 37 (3), 581–604.
- Nightingale, A.J., 2017. Power and politics in climate change adaptation efforts: struggles over authority and recognition in the context of political instability. *Geoforum* 84, 11–20.
- Olivier de Sardan, J.P., 2015. O. Practical Norms: Informal Regulations within Public Bureaucracies (In Africa and beyond). *Real governance and Practical Norms in Sub-Saharan Africa*. Routledge, London.
- Orr, K., Nutley, S., Russell, S., Bain, R., Hacking, B., Moran, C. (Eds.), 2016. *Knowledge and Practice in Business and Organisations*. Routledge.
- Poppe, J., 2012. Conservation’s ambiguities: rangers on the periphery of the W park, Burkina Faso. *Conserv. Soc.* 10 (4), 330–343.
- Ricks, J.I., 2016. Building participatory organizations for common pool resource management: water user group promotion in Indonesia. *World Dev.* 77, 34–47.

- Sevä, M., Sandström, A., 2017. Decisions at Street Level: assessing and explaining the implementation of the European water framework directive in Sweden. *Environ. Pol. Govern.* 27 (1), 74–89.
- Sager, F., Thomann, E., Hupe, P., 2020. Accountability of public servants at the street level. In: Sullivan, H., Dickinson, H., Henderson, H. (Eds.), *The Palgrave Handbook of the Public Servant*. Palgrave Macmillan.
- Sevä, M., Jagers, S.C., 2013. Inspecting environmental management from within: the role of street-level bureaucrats in environmental policy implementation. *J. Environ. Manag.* 128, 1060–1070.
- Sharma, A., Gupta, A., 2009. *The Anthropology of the State: a Reader*. John Wiley & Sons.
- Soss, J., Fording, R.C., Schram, S.F., 2011. *Disciplining the Poor: Neoliberal Paternalism and the Persistent Power of Race*. University of Chicago Press.
- Sultana, F., 2020. Political ecology 1: from margins to center. *Prog. Hum. Geogr.*, 0309132520936751
- Trusty, T., Cerveny, L.K., 2012. The role of discretion in recreation decision-making by resource professionals in the USDA Forest Service. *J. Environ. Manag.* 107, 114–123.
- Tsing, A.L., 2011. *Friction: an Ethnography of Global Connection*. Princeton University Press.
- Tummers, L.L., Bekkers, V., Vink, E., Musheno, M., 2015. Coping during public service delivery: a conceptualization and systematic review of the literature. *J. Publ. Adm. Res. Theor.* 25 (4), 1099–1126.
- Tummers, L., Bekkers, V., 2014. Policy implementation, street-level bureaucracy, and the importance of discretion. *Publ. Manag. Rev.* 16 (4), 527–547.
- Van Assche, K., Beunen, R., Gruezmacher, M., Duineveld, M., 2020. Rethinking strategy in environmental governance. *J. Environ. Pol. Plann.* 22 (5), 695–708.
- Van der Heijden, J., 2017. Brighter and darker sides of intermediation: target-oriented and self-interested intermediaries in the regulatory governance of buildings. *Ann. Am. Acad. Polit. Soc. Sci.* 670 (1), 207–224.
- Vatn, A., 2018. Environmental governance—from public to private? *Ecol. Econ.* 148, 170–177.
- Weick, K.E., 1995. *Sensemaking in Organizations*, vol. 3. Sage.
- Zacka, B., 2017. *When the State Meets the Street. Public Service and Moral Agency*. The Belknap Press of Harvard University Press, Cambridge/London.